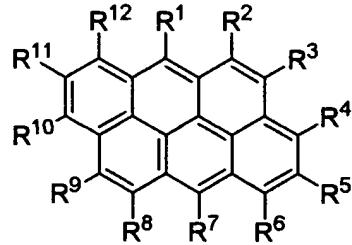


## ABSTRACT

An organic luminescent material including a compound of the following formula:



wherein:

- 5     $R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}$  and  $R^{12}$  are individual groups, and at least one group is not hydrogen among the  $R^1, R^3, R^7$ , and  $R^9$  groups.

Group 1: hydrogen, or alkyl of from 1 to 48 carbon atoms, and each  $R^1, R^2, R^3, R^4, R^5, R^6, R^7, R^8, R^9, R^{10}, R^{11}$  and  $R^{12}$  can connect with their neighboring group to form 5 or 6 member cyclic or aromatic ring system, and

- 10    Group 2: aryl or substituted aryl of from 5 to 48 carbon atoms, or 4 to 48 carbon atoms necessary to complete a fused aromatic ring of naphthenyl, anthracenyl, pyrenyl, or perylenyl; and

Group 3: heteroaryl or substituted heteroaryl of from 5 to 24 carbon atoms, or 4 to 48 carbon atoms necessary to complete a fused heteroaromatic ring of furyl, thienyl, pyridyl, 15    quinolinyl and other heterocyclic systems; and

Group 4: alkoxy, amino, alkyl amino, aryl amino dialkyl amino, or diaryl amino of from 1 to 24 carbon atoms; and

Group 5: a group consist of F, Cl, Br, I, CN, NCS, NCO, B(OH)<sub>2</sub>, B(OCH<sub>2</sub>CH<sub>2</sub>O), B[OC(CH<sub>3</sub>)<sub>2</sub>C(CH<sub>3</sub>)<sub>2</sub>O], SO<sub>2</sub> R<sup>13</sup>, SO<sub>3</sub> R<sup>14</sup>, SO<sub>2</sub>NR<sub>2</sub>, SiR<sub>3</sub>, SiHR<sub>2</sub>, SiR<sub>2</sub>OH, where R, R<sup>13</sup> and R<sup>14</sup> is hydrogen, chlorine, bromine, alkyl group containing 1-12 carbon atoms, and aryl; and

Group 6: a group of formula -LY<sub>n</sub>R<sup>15</sup> where n is 0 to 18, Y is a alkyl group contains 1 to 24 carbon atoms, R<sup>15</sup> is a hydrogen, hydroxy, amino, alkylamino, arylamino, alkyl arylamino, diarylamino, dialkylamino, or -COR<sup>16</sup> where R<sup>16</sup> is a hydrogen, chlorine, COCl, alkyl group containing 1-12 carbon atoms, --NR<sub>2</sub>, -NHR and aryl, or -COOR<sup>17</sup> where R<sup>17</sup> is a hydrogen, alkyl group containing 1-12 carbon atoms, aryl, COR, 2,4-dinitrophenyl, N-imido or -NR<sub>2</sub>; and L is a direct bond or C=O.

**PARTS LIST**

5	100	EL Device
	102	Substrate
	104	Anode
	106	Cathode
	108	Organic EL medium
10	110	Hole-transport layer
	112	Electron-transport layer
	114	External power source
	116	Conductor
	118	Conductor
15	120	Holes
	122	Electrons
	200	EL device
	202	Substrate
	204	Anode
20	206	Cathode
	208	Organic EL medium
	210	Hole-transport layer
	212	Luminescent layer

- 214      Electron-transport layer
- 300      EL device
- 302      Substrate
- 304      Anode
- 5        306      Cathode
- 308      Organic EL medium
- 310      Hole-injection layer
- 312      Hole-transport layer
- 314      Luminescent layer
- 10       316      Electron-transport layer
- 318      Electron-injection layer